

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A bacterium responsible for Whipple's disease, isolated and established in culture such that the bacterium reproducibly multiplies over time, wherein the bacterium is *Tropheryma whippelii*.
2. (Previously Presented) A bacterium according to claim 1, obtained from a culture of human fibroblasts after at least 2 months of incubation in a culture medium based on MEM.
3. (Previously Presented) A bacterium according to claim 1, wherein said bacterium is deposited in the CNCM of the Institut Pasteur under Deposit No. I-2202.
4. (Currently Amended) An isolated antigen of the bacterium according to claim 1.
5. (Previously Presented) An antigen according to claim 4, wherein said antigen is a protein having a molecular weight of about 35, 50, 60, 100 or 200 kD determined by polyacrylamide gel electrophoresis using the Western blotting technique.
- 6.-9. (Canceled)
10. (Previously Presented) An antigen according to claim 5, wherein said antigen is a protein of 200 kD, which reacts with a specific monoclonal antibody directed against the bacterium *Tropheryma whippelii* responsible for Whipple's disease or an antigen of said bacterium, said antibody being produced by a hybridoma deposited in the CNCM of the Institut Pasteur under the Deposit No. I-2411.
11. (Currently Amended) A method for the *in vitro* diagnosis of diseases associated with infections caused by *Tropheryma whippelii*, comprising contacting serum or

any other biological fluid of a patient with ~~the bacterium of claim 1 a *Tropheryma whippelii* bacterium responsible for Whipple's disease~~, and detecting an immunological reaction.

12.-14. (Canceled)

15. (Currently Amended) A method for the *in vitro* serological diagnosis according to ~~claim 14~~ claim 11, comprising:

- depositing a solution containing the bacterium *Tropheryma whippelii* responsible for Whipple's disease in or on a solid support;
- introducing serum or any other biological fluid into or onto said support;
- introducing a solution of a labeled antibody specific for a human immunoglobulin, which recognizes said bacterium, into or onto the support;
- observing an incubation period;
- rinsing the solid support; and
- detecting an immunological reaction.

16.-24. (Canceled)

25. (Previously Presented) A method for the *in vitro* diagnosis of diseases associated with infections caused by *Tropheryma whippelii*, comprising contacting serum or any other biological fluid of a patient with the antigen of claim 4, and detecting an immunological reaction.

26.-28. (Canceled)

29. (New) A method for the *in vitro* serological diagnosis according to claim 25, comprising:

- depositing a solution containing an antigen of the bacterium *Tropheryma whippelii* responsible for Whipple's disease in or on a solid support;
- introducing serum or any other biological fluid into or onto said support;

- introducing a solution of a labeled antibody specific for a human immunoglobulin, which recognizes said antigen, into or onto the support;
- observing an incubation period;
- rinsing the solid support; and
- detecting an immunological reaction.